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Lie Detectors Lie

The Pentagon's False Promise of Assured Loyalty

By Peter J. Ognibene

WASHINGTON, Jan. 3 — The Reagan administration announced today that it will randomly subject employes of the Department of Defense to a procedure called trial by ordeal. Those selected will be bound hand and foot and thrown into the Potomac River to test their "trustworthiness, patriotism and integrity." Those who float will be reinstated; those who sink will not.

The administration, obviously, made no such pronouncement on Jan. 3. However, it did the next best thing: It announced that the Pentagon would subject some 10,000 employes a year to random tests of the polygraph, the so-called lie detector. Under a new departmental directive, those judged guilty of "deception" may be removed from their posts and denied promotions. In the close-knit world of the defense establishment, a failed polygraph test will almost certainly become the kiss of death.

Though the polygraph may occasionally be of value in certain *criminal* investigations, it is worse than useless for ferreting out potential spies or crooked employees or leakers of classified information — which is ostensibly the purpose of the new Reagan scheme.

Moreover, if polygraph testing supplants other means of investigation, spies who have been trained to beat the machine may find it easier to penetrate our nation's defenses. In the end, professional liars and sociopaths may be cleared by the polygraph while hundreds of conscientious employes are forced to contend with spurious accusations that could cost them not only their jobs but their reputations.

The flaws of polygraph testing have been amply documented, especially in the past 10 years. The most comprehensive and recent study was issued in November 1983 by Congress' Office of Technology Assessment. Yet, the machines are being used more and more. In 1983, the federal government conducted 23,000 polygraph examinations; the Pentagon accounted for more than 90 percent. Nationwide, more than 1 million tests were conducted, largely by private businesses hoping to spot likely thieves. So, in spite of evidence that it is reliable only in narrowly defined criminal cases, the polygraph is growing in popularity.

Why? Government officials point to recent spy cases and embarrassing news leaks; businessmen cite rising losses from employe crime. These are valid concerns today, but the search for a truth machine is nothing new. Indeed, it is as old as recorded history.

Does the body betray the mind? The guardians of ancient societies thought so. A Hindu papyrus, written about 900 B.C., described the telltale characteristics of a killer who used poison: "He does not answer questions, or they are evasive answers; he speaks nonsense, rubs the great toe along the ground, and shivers; his face is discolored; he rubs the roots of the hair with his fingers."

Believing that the mouth of a guilty man goes dry when confronted with his crimes, Asian and European interrogators would stuff a man's mouth with rice or bread. If he could swallow, he was pronounced innocent; if he could not, he was put to death. In Bengal, criminal suspects faced a saliva test of a different sort. Those who could lick a glowing hot iron and not get burned were set free; a blistered tongue sentenced a man to death.

To 20th-century Americans, these tests seem barbaric and unscientific. Yet, there is a direct connection between those ancient magistrates and their latter-day counterparts. All share a common belief, one rooted more in folk wisdom than in science, that the body holds the key to the mind. Only the instruments have changed. Instead of hot irons, modern inquisitors use the polygraph.

The word polygraph is taken from the Greek phrase for "many writings." Appropriately enough, it was a Greek physician, Erasistratus, who, in the third century B.C., put forth the notion that deceit could be detected by changes in a person's pulse. Examining Antiochus, he found the young man's blood would race whenever they discussed his beautiful stepmother, Stratonice. Based on that observation, the physician, confirming the gossip he had heard at court, accused the two of incestuous adultery.

The machinery of "lie detection" goes back 400 years, to Galileo's invention in 1581 of the "pulsilogium," a pendulum that would swing in cadence with a person's heartbeat; a pointer on the device indicated the pulse rate. Experiments in the 18th century led to the sphygmomanometer, which measures blood pressure.

"The current instruments used by federal agencies are the product of 85 years of development by scientists and practitioners," said Norman Ansley, who heads the polygraph division of the National Security Agency, which is responsible for safeguarding U.S. military and diplomatic communications.

"Basically, the polygraph examination is a method of questioning whereby an individual is required to unequivocably respond with a yes or no answer to direct questions . . . . This questioning is done while the examinee is attached to a very sensitive instrument which monitors the person's respiration, electrodermal response and cardiovascular activity to determine if there are any significant and consistent changes in these areas in direct response to any of the questions."

The procedure is physically uncomfortable. A blood-pressure cuff is wrapped around the upper arm and inflated. One or two tubes are tied tightly about the torso to measure respiration. To detect changes in skin resistance brought about by perspiration, electrical leads are attached to two of the fingers. Then comes the interrogation.

"Reactions are significant changes from the baseline recording which is established as the norm in each of the recorded areas at the beginning of each polygram or chart," said Ansley. "Depending on the individual examinee, these changes may be as massive as a total cessation of breathing or a major increase in blood pressure or as subtle as a

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